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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,170	11/13/2006	Frank B. Stamps	0837RF-H532-US	5513

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LAW OFFICES OF JAMES E. WALTON, PLLC
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SUITE 107-328
BURLESON, TX 76028

EXAMINER

BURCH, MELODY M

ART UNIT	PAPER NUMBER
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3657

NOTIFICATION DATE	DELIVERY MODE
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08/04/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JIM@WALTONPLLC.COM

Office Action Summary	Application No. 10/568,170	Applicant(s) STAMPS ET AL.
	Examiner MELODY BURCH	Art Unit 3657

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 17, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 17, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6) <input type="checkbox"/> Other: _____.</p> |
|---|---|

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/6/11 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application 5788372 to Jones et al. in view of US Patent 5535861 to Young and JP-469423 (JP'423), US Patent 6224019 to Peterson et al. and US Patent 4273303 to Somm.

Re: claim 20. Jones et al. show a damper having an adjustable spring rate, comprising: a piston as labeled having an axis, an outer surface, and opposing ends; a housing 51f; at least one elastomeric seal 55f in sealing contact with the outer surface of the piston, the at least one seal being coaxial with the piston and limiting movement

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of the piston to a path along the axis of the piston, the at least one seal also defining fluid chambers 61f' and 61f' adjacent the ends of the piston, the at least one seal also being fixed to the housing; a primary passage 42f extending through the piston from one end to the opposing end of the piston, the primary passage providing fluid passage between the fluid chambers; and a selectively switchable valve 20f using the 1b embodiment disposed within the piston and in fluid communication with the fluid passing through the primary passage, the selectively switchable valve being adapted for controlling a flow of fluid from one of the chambers to another of the chambers through the primary passage, such that when the selectively switchable valve is open, the flow of fluid through the primary passage is not resisted by the selectively switchable valve in either direction; further, when the selectively switchable valve is closed, the flow of fluid through the primary passage is restricted in both directions by the selectively switchable valve; and wherein when the flow of fluid through the primary passage is permitted, movement of the piston is resisted by a first spring rate due to a shear force required to cause shear deflection of the seals; and when the flow of fluid through the primary passage is restricted, movement of the piston is resisted by a second spring rate due to a fluid force required to cause bulging deflection of the seals.

See annotated figure 4 below.

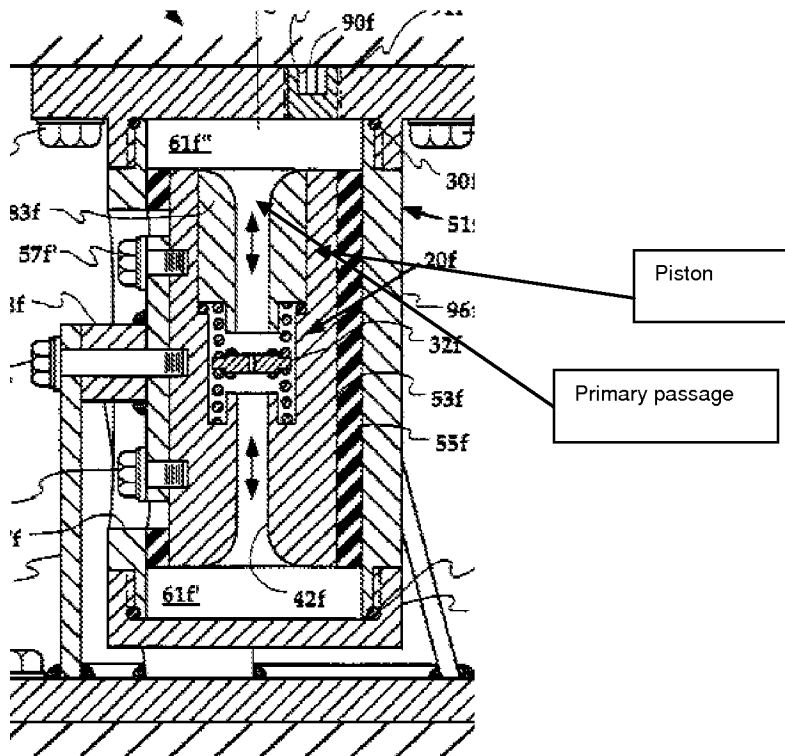


Fig. 4

Jones et al. are silent with regards to the at least one seal being a plurality of seals. In *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

Jones et al., as modified, are silent with regards to the elastomeric seals being formed of layers of an elastomeric material and a rigid non elastomeric material.

Young teaches the use of elastomeric seals being formed of layers of an elastomeric material 23 and a rigid non elastomeric material 26.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the elastomeric seals of Jones et al. or as modified to have included layers of an elastomeric material and a rigid non elastomeric material, as taught by Young, in order to provide a means of having seals with adequate stiffness for improved product reliability.

Jones et al., as modified, are silent with regards to the valve being a rotary valve with an associated switch.

JP'423 teaches in the English abstract the use of rotary valve with an associated switch.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Jones et al., as modified, to have included a rotary valve with an associated switch, as taught by JP'423, in order to provide a means of electrically changing the damping characteristics of a device to enable active control.

Jones et al., as modified, are silent with regards to a control system operably associated with the switch, the control system being configured to automatically open and close the selectively switchable rotary valve upon detection of a ground surface over which the aircraft is flying.

Peterson et al. teach in col. 6 lines 18-20 the use of an aircraft employing a control system operably associated with a switch, the control system being configured

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to automatically make fluid flow adjustments upon detection of a ground surface over which the aircraft is flying.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the damper of Jones et al., as modified, to have made airflow adjustments based on detection of a ground surface, as taught by Peterson et al., in order to provide a means of actively controlling the damping characteristics of the damper to improve the "feel" of the ride.

Jones et al., as modified, are silent with regards to the assembly resulting in a stiffer spring rate upon detection of a selected proximity to ground.

Somm teaches in col. 1 lines 18-25 the vibration damping or shock absorbing aspect of a landing gear being stiffer upon landing (a selected proximity to ground) as opposed to actually being on ground (post landing).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the damper of Jones et al., as modified, to have made the assembly stiffer upon aircraft landing, in view of the teachings of Somm, in order to achieve active control of the damper and to improve the "feel" of the ride.

4. Claims 11, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application 5788372 to Jones et al. in view of US Patent 5535861 to Young, US Patent 2774553 to Jensen and JP-469423 (JP'423) and US Patent 6224019 to Peterson et al.

Re: claim 11. Jones et al. show a damper having an adjustable spring rate, comprising: a piston as labeled having an axis, an outer surface, and opposing ends; a

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housing 51f; at least one elastomeric seal 55f in sealing contact with the outer surface of the piston, the at least one seal being coaxial with the piston and limiting movement of the piston to a path along the axis of the piston, the at least one seal also defining fluid chambers 61f' and 61f' adjacent the ends of the piston, the at least one seal also being fixed to the housing; a primary passage 42f extending through the piston from one end to the opposing end of the piston, the primary passage providing fluid passage between the fluid chambers; and a selectively switchable valve 20f using the 1b embodiment disposed within the piston and in fluid communication with the fluid passing through the primary passage, the selectively switchable valve being adapted for controlling a flow of fluid from one of the chambers to another of the chambers through the primary passage, such that when the selectively switchable valve is open, the flow of fluid through the primary passage is not resisted by the selectively switchable valve in either direction; further, when the selectively switchable valve is closed, the flow of fluid through the primary passage is restricted in both directions by the selectively switchable valve; and wherein when the flow of fluid through the primary passage is permitted, movement of the piston is resisted by a first spring rate due to a shear force required to cause shear deflection of the seals; and when the flow of fluid through the primary passage is restricted, movement of the piston is resisted by a second spring rate due to a fluid force required to cause bulging deflection of the seals.

See annotated figure 4 above.

Jones et al. are silent with regards to the at least one seal being a plurality of seals. In *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) the court held that

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mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

Jones et al., as modified, are silent with regards to the elastomeric seals being formed of layers of an elastomeric material and a rigid non elastomeric material.

Young teaches the use of elastomeric seals being formed of layers of an elastomeric material 23 and a rigid non elastomeric material 26.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the elastomeric seals of Jones et al. or as modified to have included layers of an elastomeric material and a rigid non elastomeric material, as taught by Young, in order to provide a means of having seals with adequate stiffness for improved product reliability.

Jones et al., as modified, are silent with regards to the valve being a rotary valve with an associated switch.

JP'423 teaches in the English abstract the use of rotary valve with an associated switch.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Jones et al., as modified, to have included a rotary valve with an associated switch, as taught by JP'423, in order to provide a means of electrically changing the damping characteristics of a device to enable active control.

Jones et al., as modified, are silent with regards to the secondary passage communicating the fluid chambers.

Jensen teaches in figure 5 the limitation of a damper comprising a secondary passage 146 communicating fluid chambers 110, 112 which is located in the piston 108.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the damper of Jones et al., as modified, to have included a secondary passage located in the piston, in view of the teachings of Jensen, in order to provide damping in both directions as suggested by Jensen.

Jones et al., as modified, are silent with regards to a control system operably associated with the switch, the control system being configured to automatically open and close the selectively switchable rotary valve upon detection of a ground surface over which the aircraft is flying.

Peterson et al. teach in col. 6 lines 18-20 the use of an aircraft employing a control system operably associated with a switch, the control system being configured to automatically make fluid flow adjustments upon detection of a ground surface over which the aircraft is flying.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the damper of Jones et al., as modified, to have made airflow adjustments based on detection of a ground surface, as taught by Peterson et al., in order to provide a means of actively controlling the damping characteristics of the damper to improve "feel".

Re: claim 17. Jones et al., as modified, are silent with regards to the damper comprising a bypass passage for limiting the pressure imbalance between the fluid chambers.

Jensen teaches in figure 5 a damper comprising a bypass passage 148 located in the piston 108.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the damper of Jones et al. or as modified to have included a bypass passage in the piston, as taught by Jensen, in order to provide a means of relieving pressure in one of the chambers when it exceeds a certain limit as suggested by Jensen.

Re: claim 19. Jensen teaches in figure 5 the use of a spring loaded bypass valve located within the bypass passage 148.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the bypass passage of Jones et al., as modified, to have included a bypass valve, as taught by Jensen, in order to provide a means of selectively relieving pressure based on the pressure achieving a desired limit selecting depending on the particular application.

Claim Objections

5. Claim 20 is objected to because of the following informalities: the phrase "the a stiffer spring rate" in line 5 from the bottom should be reworded for grammatical purposes. Appropriate correction is required.

Response to Arguments

6. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mmb
July 31, 2011

/Melody M. Burch/
Primary Examiner, Art Unit 3657

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